

ABSTRACT

A method and system for assigning uplink (UL) slots to optimize time division duplex (TDD) UL power. In order to assure proper power control gain, UL slots are judiciously allocated close to the beacon slot. The UL slots may be allocated based on channel sensing. All users are sorted in the order of reducing fading losses. Sorting information is also used to allocate the UL slots. The UL slots may also be allocated based on signal interference information, code usage availability estimates and spread signal interference values. Alternatively, block error rate (BLER) and signal to interference ratio (SIR) measurements may be used to allocate the UL slots.